



SOUTH CAROLINA ELECTRIC & GAS COMPANY ENERGY CONSERVATION PRESENTATION

Prepared for:
THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA
Electric and Natural Gas Conservation and Efficiency Workshop
NDI-2007-EG
August 16, 2007



Energy Conservation Milestones

- **1971 - Cost of Power Stops Decreasing**
- **1977 – SCPSC orders load control study and annual LM reports**
- **1978 – SCE&G forms LM Committee and offers interruptible rate**
- **1980 – Home Energy Audits, TOU and Conservation Rates, Energy Centers Built (mid 1980s) and more**
- **1987 – SCPSC opens IRP Docket No. 87-223-E. Genesis of today's demand side management programs.**
- **1989 – SCE&G files first IRP.**
- **2005 – EPAct 2005. Renewed National Interest.**



Demand Side Management

Customer Information Programs:

- Annual Energy Campaigns
- Web-Based Information and Services

Energy Conservation:

- Value Visit Program
- Rate 6 Energy Saver Rate
- Seasonal Rates

Load Management Programs:

- Retail Standby Generator Program
- Wholesale Standby Generator Program
- Interruptible Load Program
- Real Time Pricing Rate
- Time Of Use Rates



Demand Side Management

Annual Energy Campaigns

- Billboards
- Radio
- Television
- Weatherline
- “Energy Wise” Newsletter
- Bill Inserts
- Brochures/Printed Materials
- On-hold Messaging
- Small Commercial Direct Mail
- New Releases
- Featured News Guests
- Project Cool Breeze
- SCE&G’s Web Site
- Weatherization Project
- Energy Tips Video
- Energy Awareness Month
- Lowe’s Partnership
- Radio Remotes

Demand Side Management Web Page

[Home](#) [FAQs](#) [Contact Us](#) [Site Map](#)

Account Sign In

[Forgot username or password?](#)

[Register for an online account](#)



Manage Energy Use

Clean, reliable natural gas is America's most popular home-heating fuel, warming more households than all other energy forms combined. And every day, we use products powered by electricity that add comfort and convenience to our lives. There's no doubt that energy is a cornerstone in our day-to-day activities.

At SCE&G, we know that managing your energy usage can have a big impact on your budget, as well as on your comfort and welfare, as well as that of others. Click around and explore the number of valuable tips and tools we've gathered to help you "do energy right."

[View a previous SCE&G bill](#), [sign in to study your energy usage history](#), or estimate your next bill using our new [residential bill estimator](#). Doing energy right is just one click away.

▼ residential services

- customer service center
- my online account
- Comforts of Home®
- why choose natural gas
- the value of electricity

- manage energy use

- about my bill
- estimate my bill
- energy assistance
- energy management
- how to weatherize
- gas appliance guide
- electric appliance guide
- factors affecting natural gas rates
- the gift of comfort

- moving?

- tree trimming and landscaping

- service area map

Demand Side Management Web Page

Energy Analyzer

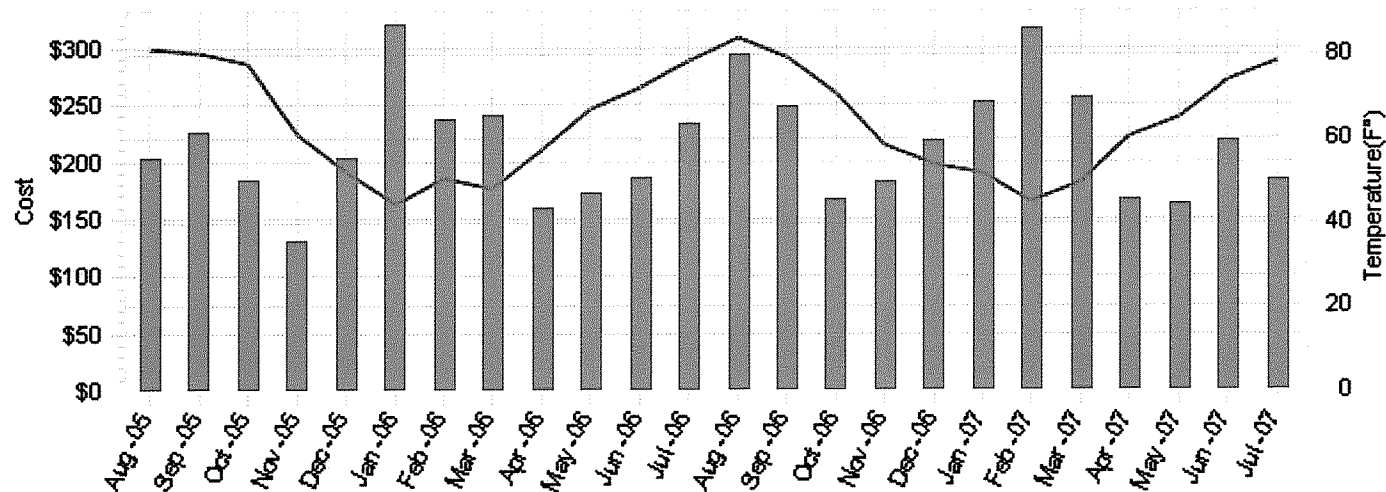
- View Temperature Impact



Report & print settings

☐ Total Monthly Energy Cost

☐ Average Monthly Temperature



In **07/2007** the number of days **Less Than 30°** = 0 days

[Click here for temperature data](#)

Demand Side Management Web Page

**SCE&G**
A SCANA COMPANY

▶ Home ▶ FAQs ▶ Contact Us ▶ Site Map

search

Account Sign In

[Forgot username or password?](#)

[Register for an online account](#)



How to Weatherize

Learn how to make your home more energy efficient.

Video Tips

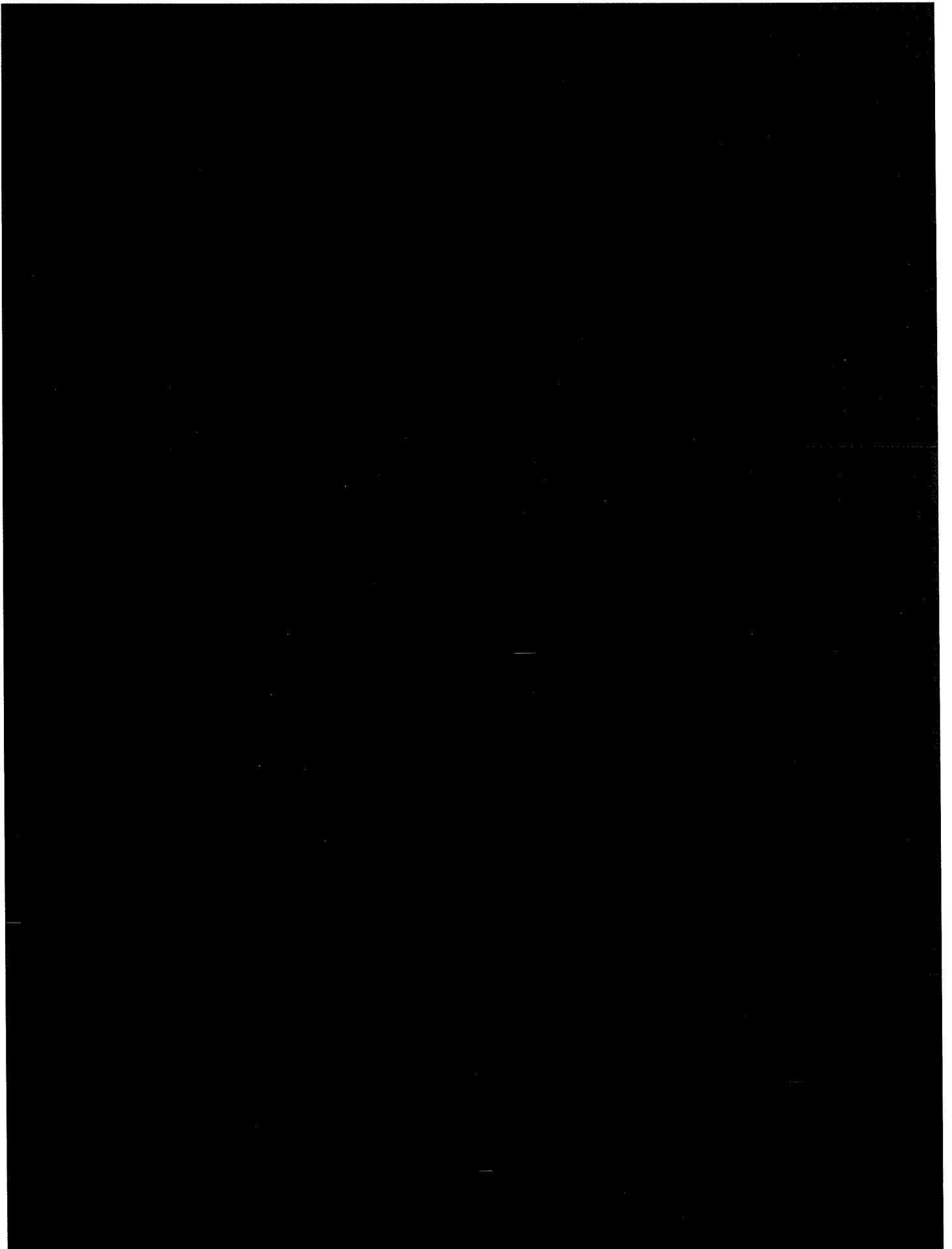
 **Insulation** ([56k](#) | [100k](#) | [300k](#))

 **Doors and Windows** ([56k](#) | [100k](#) | [300k](#))

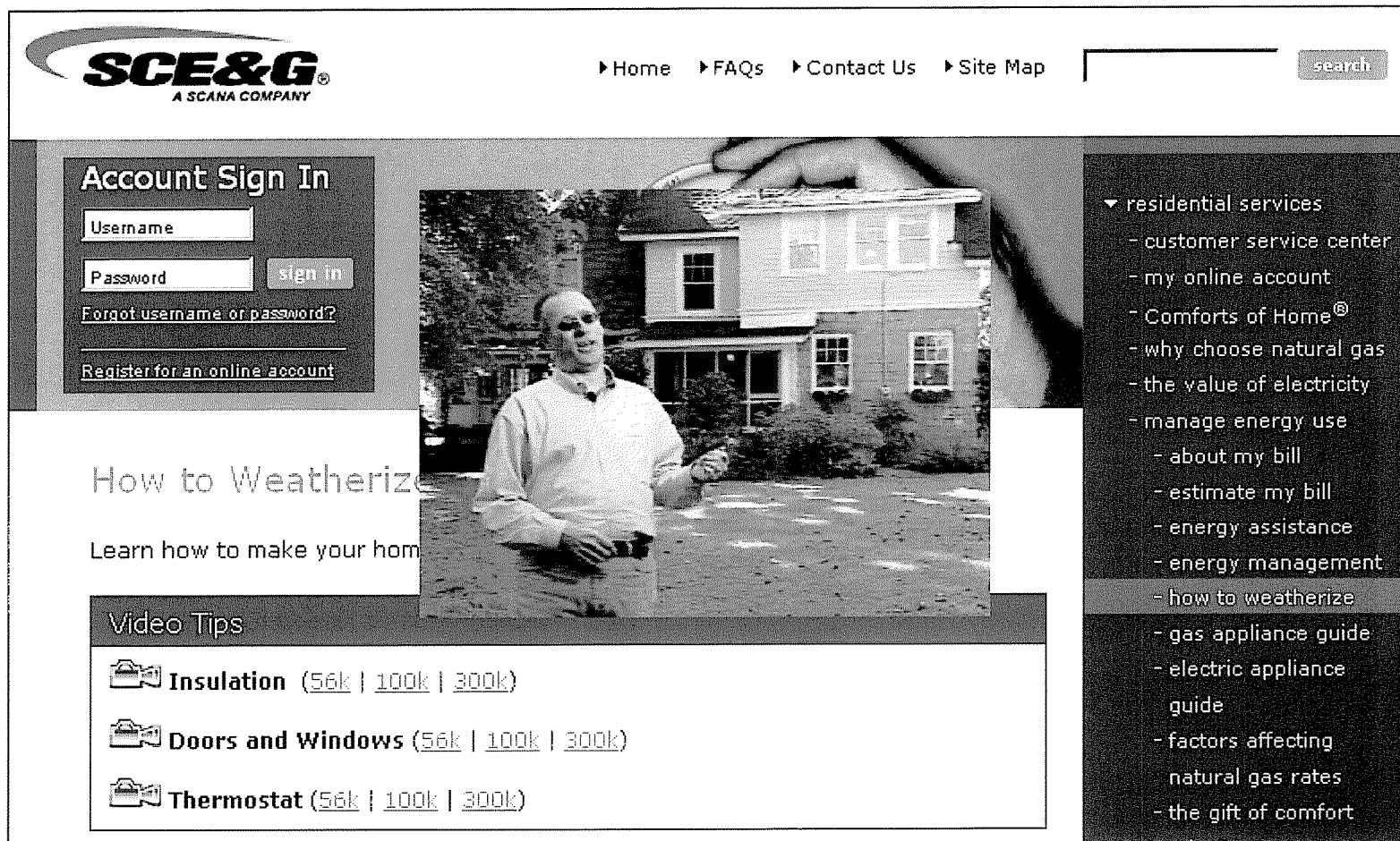
 **Thermostat** ([56k](#) | [100k](#) | [300k](#))

▼ residential services

- customer service center
- my online account
- Comforts of Home®
- why choose natural gas
- the value of electricity
- manage energy use
 - about my bill
 - estimate my bill
 - energy assistance
 - energy management
- how to weatherize
- gas appliance guide
- electric appliance guide
- factors affecting natural gas rates
- the gift of comfort



Demand Side Management Web Page



The screenshot shows the SCE&G website interface. At the top left is the SCE&G logo with the tagline 'A SCANA COMPANY'. To the right of the logo are navigation links: 'Home', 'FAQs', 'Contact Us', and 'Site Map'. Further right is a search bar with the word 'search' inside. Below the navigation bar, the page is divided into several sections. On the left, there is an 'Account Sign In' box containing fields for 'Username' and 'Password', a 'sign in' button, and links for 'Forgot username or password?' and 'Register for an online account'. In the center, there is a large image of a man in a white shirt standing in front of a house, with the text 'How to Weatherize' and 'Learn how to make your home' overlaid. Below this image is a 'Video Tips' section with three items: 'Insulation (56k | 100k | 300k)', 'Doors and Windows (56k | 100k | 300k)', and 'Thermostat (56k | 100k | 300k)'. On the right side, there is a vertical menu titled 'residential services' with a list of links: 'customer service center', 'my online account', 'Comforts of Home®', 'why choose natural gas', 'the value of electricity', 'manage energy use', 'about my bill', 'estimate my bill', 'energy assistance', 'energy management', 'how to weatherize', 'gas appliance guide', 'electric appliance guide', 'factors affecting natural gas rates', and 'the gift of comfort'.

SCE&G
A SCANA COMPANY

▸ Home ▸ FAQs ▸ Contact Us ▸ Site Map

search

Account Sign In

Username

Password **sign in**




[Forgot username or password?](#)

[Register for an online account](#)

How to Weatherize

Learn how to make your home

Video Tips

-  **Insulation** ([56k](#) | [100k](#) | [300k](#))
-  **Doors and Windows** ([56k](#) | [100k](#) | [300k](#))
-  **Thermostat** ([56k](#) | [100k](#) | [300k](#))

▼ residential services

- customer service center
- my online account
- Comforts of Home®
- why choose natural gas
- the value of electricity
- manage energy use
 - about my bill
 - estimate my bill
 - energy assistance
 - energy management
- how to weatherize
- gas appliance guide
- electric appliance guide
- factors affecting natural gas rates
- the gift of comfort

Demand Side Management

Load Management

• Interruptible Load	203
• Standby Generators	<u>25</u>
Total	228 MWs



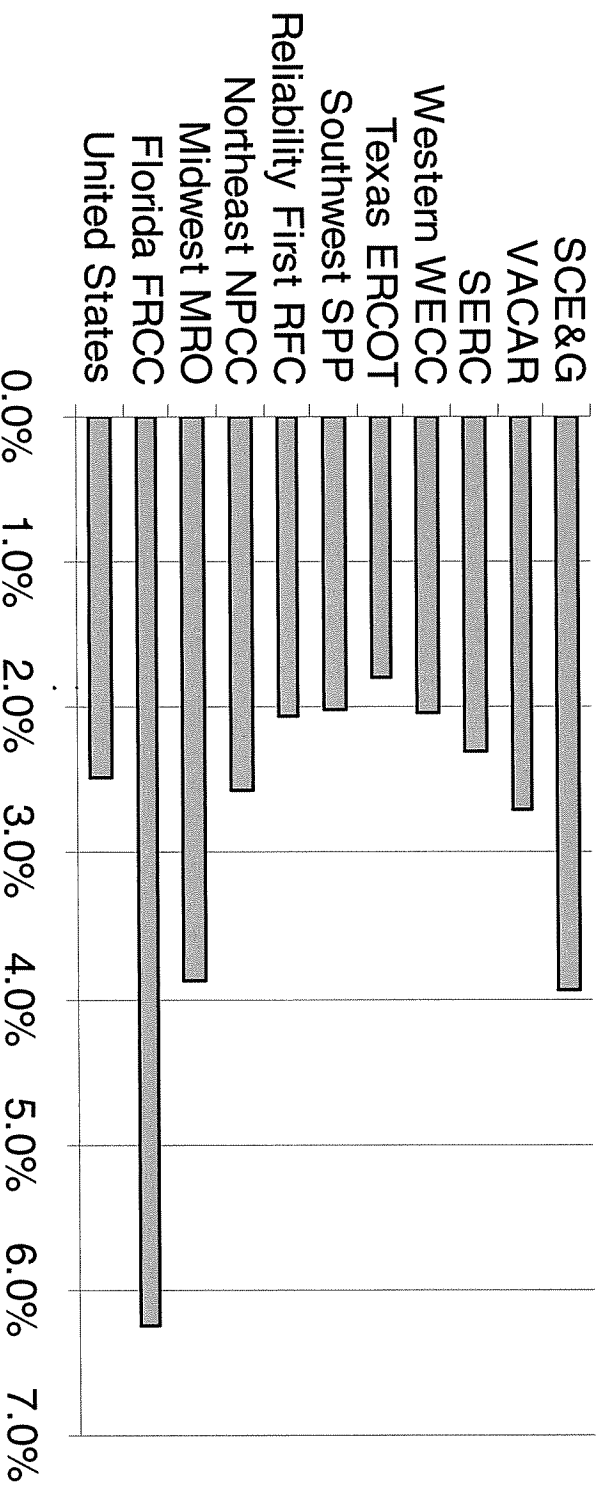
Demand Side Management

Measures of Success

- 173,923 Customers Registered For WEB access
- Over 50,000 Customers on Conservation Rate
- 20% of Commercial Sales on TOU or RTP Rates

Measures of Success

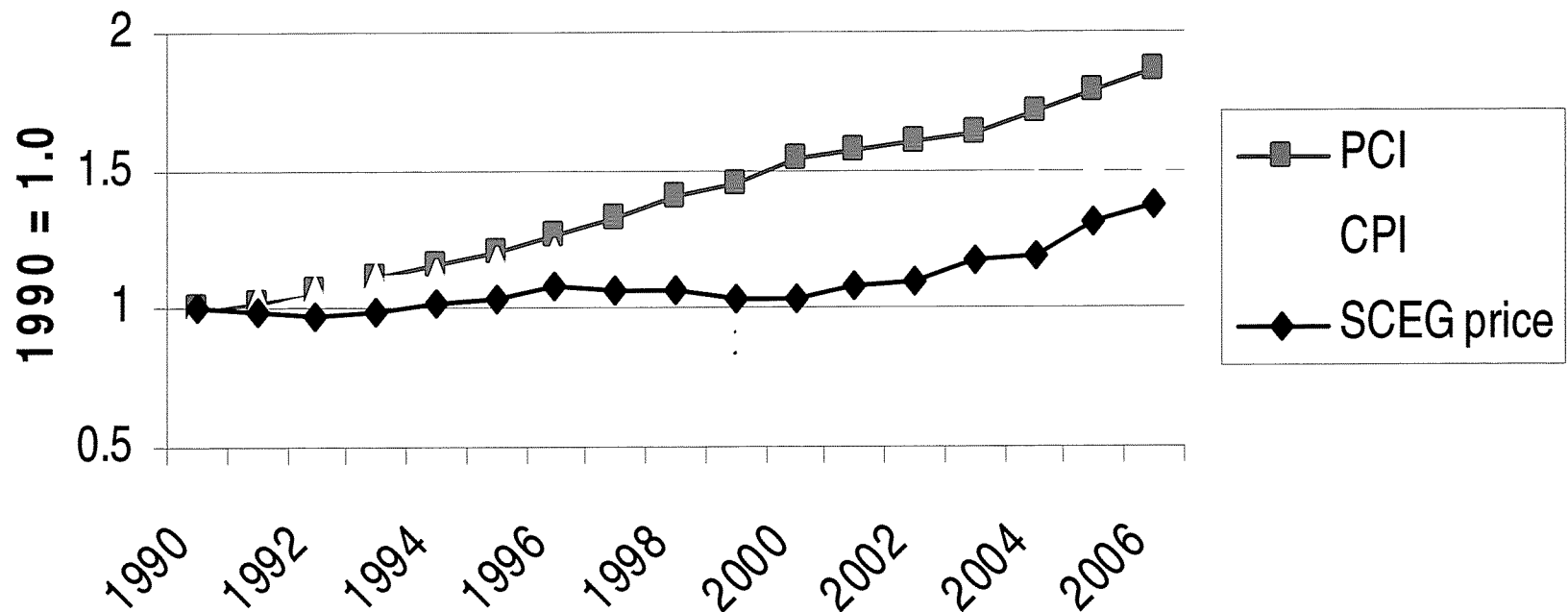
Load Management As Percent Of Peak



Source: NERC 2006 ES&D Database

The Cost of Energy

Per Capita Income, Inflation and Electric Price





SCE&G: RECENT EFFICIENCY AND CONSERVATION ACTIVITY

- **Overall Goals**
 - Value-added demand-side initiatives
 - Learn from the past, learn from others
 - Conduct studies to properly focus our conservation investments
 - A balanced, measured approach
 - Consider all reasonable options, invest in most promising programs
 - Structure programs to meet our customers needs and load-shape requirements



SCE&G: RECENT EFFICIENCY AND CONSERVATION ACTIVITY

- SCE&G's "Focused Approach":
 - Learn from others – review national programs to identify new, unique, and most promising conservation programs
 - Customer surveys to identify customer desires, needs, and "acceptability"
 - Use pilot programs or "scaleable" programs



SCE&G: RECENT EFFICIENCY AND CONSERVATION ACTIVITY

- Customer Focused Surveys
 - SCE&G is conducting surveys to gauge customer interest in energy conservation programs to ensure that we invest in programs our customers will use!
 - Value-added initiatives are the ultimate goal!

SCE&G: RECENT EFFICIENCY AND CONSERVATION ACTIVITY

Customer Focused Surveys - Some Results to Date

	Time of Use Rates	Green Power (\$4/mo)	Home Energy Audit (\$25)	Online Energy Audit (Free)	Weatherization Kit (Free)
Very Unlikely	19%	15%	28%	24%	17%
Somewhat likely	15%	14%	21%	11%	10%
Don't know/No opinion	13%	23%	11%	3%	8%
Somewhat Likely	30%	30%	24%	28%	30%
Very Likely	24%	19%	16%	27%	36%



SCE&G: RECENT EFFICIENCY AND CONSERVATION ACTIVITY

- Customer Focused Surveys - Results to Date
 - The groups most interested in almost every program:
 - < 45 Years Old
 - Middle to Upper Income
 - Kids in household: especially teenagers
 - *A concern* - how do we reach older and lower income customers and why aren't they as interested in participating in conservation programs?



SCE&G: RECENT EFFICIENCY AND CONSERVATION ACTIVITY

- Green Power
 - Mission is to promote renewable energy
 - Organization is called Palmetto Clean Energy (“PaCE”)
 - Program is expected to be ready for customer participation in late 2007 or early 2008
 - PaCE will offer a block or unit of green power to the citizens of South Carolina on a monthly basis for a certain price.
 - The program is completely voluntary



SCE&G: RECENT EFFICIENCY AND CONSERVATION ACTIVITY

- Hybrid Vehicle
 - Assess the opportunity for plug-in hybrid electric vehicles (PHEV) to reduce fuel costs, protect the environment, and reduce our nation's dependence on petroleum
 - Foster public awareness of PHEV benefits



EXPECTED IMPACT ON CONSERVATION ACTIVITIES FROM THE ENERGY POLICY ACT 2005

- Revised energy efficiency standards for Federal buildings and low income and public housing (Section 125)
- Updated Energy Star appliance standards (Section 131)
- Add/update other product efficiency standards (Section 135)
- Renewable energy development (Section 202)
- Electric Reliability Standards (Section 215)

(Continued . . .)



EXPECTED IMPACT ON CONSERVATION ACTIVITIES FROM THE ENERGY POLICY ACT 2005

- Electric Transmission Siting Initiatives (Section 216)
- Hybrid vehicles research and promotion (Section 711, 721)
- Net Metering and Smart Metering (Section 1251, 1252)
- Support for clean coal and nuclear energy (Title IV and VI)



EXPECTED IMPACT ON CONSERVATION ACTIVITIES FROM THE ENERGY POLICY ACT 2005

- Tax Credits and Other Incentives for:
 - Automobiles - hybrids
 - Home improvements – windows, doors, HVAC, photovoltaics, insulation
 - Business – purchase of hybrids, energy efficient buildings
 - Biodiesel & alternate fuel credits for filling stations and agri-biodiesel producers
 - Energy efficient buildings
 - Nuclear Power



ENERGY CONSERVATION: FORESEEABLE ISSUES

- Program approval procedures
- Program evaluation procedures
- Cost Recovery issues
 - Timely cost recovery
 - Incentives for efficiency investments and results
 - Recovery of “lost revenues”